

**UNITED STATES DISTRICT COURT  
SOUTHERN DISTRICT OF TEXAS  
HOUSTON DIVISION**

**FELIX L. SORKIN,**

**Plaintiff,**

**VS.**

**AMSYSCO, INC.,**

**Defendant.**

§  
§  
§  
§  
§  
§  
§  
§

**CIVIL ACTION NO. H-04-4182**

**MEMORANDUM AND ORDER**

This patent infringement case arises from Defendant’s sale of a sealing cap used in concrete post-tensioning systems. Defendant Amsysco is an Illinois corporation that sells post-tensioning products to building contractors. Post-tensioning systems strengthen concrete structures by incorporating tensioned tendons into those structures. A grease-filled cap fits over the end of each tendon at the anchoring point. In 1995, Plaintiff Felix Sorkin was issued a patent – U.S. Patent No. 5,440,842 (the “Sorkin patent”) – for a cap containing a membrane holding the grease in place inside the cap, to prevent leakage during shipment. Plaintiff now contends that Defendant has infringed the patent by selling a product that meets each of the patent’s limitations.

**I. LEGAL STANDARD**

Adjudication of a patent claim is a two-step process. *Markman v. Westview Instruments, Inc.*, 517 U.S. 370, 384 (1996). First, the Court determines, as a matter of law, the meaning of the claims. *Id.* at 388 (“The construction of written instruments is one of those things that judges often do and are likely to do better than jurors unburdened by training in exegesis.”). Second, the trier of fact determines whether the accused product infringes the patent, as construed by the Court. *Id.* at 377 (“[T]here is no dispute

that infringement cases today must be tried to a jury, as their predecessors were more than two centuries ago.”).

Here, the parties dispute the proper construction of three terms used in the patent. Accordingly, on February 24, 2006, the Court held a claim construction hearing, at which the parties and Court-appointed expert Pol Spanos presented evidence and argument to support their proposed constructions. After considering the evidence and arguments advanced at the hearing, as well as the parties’ briefs and Dr. Spanos’s expert report, the Court adopts the following claim constructions.

## **II. CLAIM CONSTRUCTIONS**

### **A. “Exterior Outer Edge”**

The phrase “exterior outer edge” appears in claims 1 and 12 of the Sorkin patent.

Claim 1 reads, in relevant part, as follows:

1. An apparatus . . . comprising:  
a vessel member having a void and an exterior outer edge along the  
perimeter of said vessel member;  
. . .  
a retaining member permanently affixed around said exterior outer edge of  
said vessel member . . . .

(Parties’ Trial Notebook, Ex. 1 (Sorkin patent), at 6.) Claim 12 contains identical language to that quoted above. (*Id.*)

Plaintiff argues that “exterior outer edge” means “an outer edge or ridge along the perimeter of a vessel member.” (Pl.’s 5th Claim Constr. Br. at 10.) Defendant contends that “exterior outer edge” means “an outer edge located outside of the sealing cap vessel.” (Def.’s Br. in Resp. to Pl.’s 4th Claim Constr. Br. at 6.) According to Dr.

Spanos, the appropriate construction of “exterior outer edge” is “an exterior outer edge along the perimeter/boundary of a vessel member.” (Dr. Spanos’s Prelim. Report<sup>1</sup> at 2.)

None of the suggested constructions resolves the ambiguity inherent in the disputed term. Both parties’ definitions simply reiterate the word “outer” without explaining what it means. The Court is also unable to derive guidance from Dr. Spanos’s construction. Because claim construction is intended to clarify the meanings of disputed terms, not to ignore or perpetuate asserted ambiguities, the Court undertakes to provide a more complete construction of “exterior outer edge.”

At the hearing and in his briefs, Plaintiff has argued that “exterior” means “not deep within the interior.” (See Pl.’s 5th Claim Constr. Br. at 10 (“[T]he [drafting] attorney appears to have used the term[s] ‘outermost’ and ‘exterior outer’ together to emphasize . . . that the retaining member was not affixed *in the depths* of what was referred to as the ‘void,’ ‘vessel member,’ ‘vessel’ or ‘vessel area’ of the sealing cap.”) (emphasis added).) This proffered construction gives “exterior” a meaning wholly untethered to its common usage. Defendant, on the other hand, insists that “exterior” must mean “outside.” (See Def.’s Br. in Resp. to Pl.’s 4th Claim Constr. Br. at 6.)

Defendant is correct. During the prosecution of the Sorkin patent, in response to the patent examiner’s finding that the invention was anticipated by prior art, Plaintiff argued that:

The location of the membrane in the prior art is also better understood by an inspection of Figure 4 of the current application. Figure 4 shows a sealing cap 42 with an “outer edge 64.” Although not numbered, the perspective of Figure 3 also show[s] a recess *below* outer edge 64 and well within the interior void of cap 42. Thus, the recess area is *separate and*

---

<sup>1</sup> Dr. Spanos submitted his expert report as a preliminary report, indicating that he reserved the right to amend the report following the claim construction hearing. At that hearing, Dr. Spanos indicated that he does not intend to submit an amended final report. His preliminary report is, therefore, also his final report.

*apart from* the outer edge 64. Moreover, returning to the DOCUMENT, it is clear that the MEMBRANE is within the void defined by the cap and on the recess area, and not on the separate and distinctive outer edge (labeled 64 in Figure 4).

(Parties' Trial Notebook, Ex. 2 (prosecution history), at 83 (emphases in original); *see also id.* at 3 (Figure 4).)

In referring to the recess inside the cap depicted in Figure 4, Plaintiff pointed out that it was “*below* outer edge 64 and *well within the interior* void of cap 42.” (*Id.*, Ex. 2, at 83) (second emphasis added).) It is, therefore, evident that Plaintiff interpreted the term “interior” as encompassing all of the space below edge 64, and not just the deeper regions, which are instead described as “well within” the interior. Thus, because all space below edge 64 is “interior,” it follows that the “exterior” must be located at or above edge 64 – in other words, outside of and adjacent to the void, or vessel member, and on the outside of the cap. Accordingly, the Court construes “exterior outer edge,” as used in claims 1 and 12 of the Sorkin patent, to mean “the portion of the sealing cap that is adjacent to but outside of the vessel member.”

#### **B. “Outermost Exterior Outer Ridge”**

Plaintiff contends that the phrase “outermost exterior outer ridge,” as used in claim 9, is interchangeable with and has the same meaning as the phrase “exterior outer edge” used in claims 1 and 12. (*See* Pl.’s 5th Claim Constr. Br. at 10-11.) Defendant argues that the addition of the word “outermost” and the substitution of “ridge” for “edge” alter the phrase’s meaning, such that “outermost exterior outer ridge” should be construed to mean “an outer ridge located farthest outside the sealing cap vessel.” (Def.’s Br. in Resp. to Pl.’s 4th Claim Constr. Br. at 9.) Dr. Spanos proposes that the phrase be

construed as follows: “an exterior outer ridge along the perimeter/boundary of a vessel member.” (Dr. Spanos’s Prelim. Report at 2.)

Because the patent refers to the same element of Figure 4 as both “outer ridge 64” and “outer edge 64” (*see* Parties’ Trial Notebook, Ex. 1, at 5 ¶¶ 3, 5), the Court finds that the two terms are interchangeable and synonymous. “Ridge” and “edge,” therefore, bear the same construction. With regard to “outermost,” the Court finds that, when read in context with claim 9, which describes the edge as “mateable” with an anchor supporting the tendon that is to be inserted into the vessel within the cap, “outermost” is best construed as meaning “most exterior.” The patent clearly contemplates the outermost exterior outer ridge as that portion of the cap that comes into contact with the anchor when the tendon end is fully inserted into the cap. Thus, the word “outermost” serves the function of describing that portion of the cap that is adjacent to but furthest outside of the void, or vessel member. For these reasons, the Court construes the term “outermost exterior outer ridge” to mean “the portion of the sealing cap that is adjacent to but furthest outside of the vessel member.”

### **C. “Permanently Affixed”**

Plaintiff argues that the phrase “permanently affixed,” as used in claims 1, 9, and 12 of the Sorkin patent, means “secured and remaining without essential change, until the cap is inserted in place into an anchor.” (Pl.’s 5th Claim Constr. Br. at 11.) Defendant contends that the phrase means “attached or fastened in a continuing and enduring manner.” (Def.’s Resp. to Pl.’s 4th Claim Constr. Br. at 12.) Dr. Spanos proposes that the term be construed as meaning “fixed on the cap and remaining unchanged until the cap is inserted into an anchor.” (Dr. Spanos’s Prelim. Report at 2.)

The Court finds the construction advocated by Plaintiff and by Dr. Spanos to be the appropriate interpretation. The retaining member described in the Sorkin patent is to be “permanently affixed” in the sense that it is not meant to be detachable from the cap by any means other than force. In other words, it may not be removed and reaffixed at will. Once attached, it remains attached until punctured by the tendon end. Accordingly, the Court adopts the following construction of “permanently affixed”: “secured and remaining without essential change, until the cap is inserted in place into an anchor.”

### CONCLUSION

The Court hereby **ADOPTS** the following constructions of the disputed patent terms:

<b>Disputed Term</b>	<b>Construction</b>
“exterior outer edge”	“the portion of the sealing cap that is adjacent to but outside of the vessel member”
“outermost exterior outer ridge”	“the portion of the sealing cap that is adjacent to but furthest outside of the void, or ‘vessel member’”
“permanently affixed”	“secured and remaining without essential change, until the cap is inserted in place into an anchor”

**IT IS SO ORDERED.**

**SIGNED** at Houston, Texas, on this the 27th day of February, 2006.




---

KEITH P. ELLISON  
UNITED STATES DISTRICT JUDGE

**TO INSURE PROPER NOTICE, EACH PARTY WHO RECEIVES  
THIS ORDER SHALL FORWARD A COPY OF IT TO EVERY  
OTHER PARTY AND AFFECTED NON-PARTY EVEN THOUGH  
THEY MAY HAVE BEEN SENT ONE BY THE COURT.**